CLAIM AMENDMENTS

1 through 33 (canceled)

34. (New) MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008 comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome.

35. (New) A vaccine comprising MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008 comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome.

36. (New) A pharmaceutical composition comprising MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008 comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome and a pharmaceutically acceptable carrier, diluent, adjuvant and/or additive.

37. (New) A method for effecting an immune response in a living animal, including a human, comprising administering a therapeutically effective amount of MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, to the animal or human to be treated.

38. (New) An isolated cell comprising MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome.

39. (New) A method for producing MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, comprising the steps of

- infecting a cell with MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008;
- transfecting the infected cell with a first vector

construct comprising a gene being heterologous to the MVA-BN poxviral genome, and a genomic poxvirus sequence capable of directing the integration of the heterologous gene into an insertion site of the MVA-BN poxviral genome;

- identifying, isolating and, optionally, purifying the generated recombinant poxvirus;

- repeating the above steps by using the recombinant poxvirus obtained from previous steps for infecting the cell and an additional vector construct comprising a further gene being heterologous to the poxviral genome and homologous to the gene of the first vector construct.

40. (New) A method for detecting cells, cell lysates or fractions thereof infected with MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, which comprises the steps of:

(a) contacting the cells or the lysates or factions thereof with a probe containing a DNA sequence, wherein the DNA sequence comprises the at least two foreign genes, which are homologous in comparison to each other, and at least a part of the sequence of the MVA-BN poxviral genome as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, to

permit hybridization between the homologous genes in the probe and the homologous genes from any of the MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, contained in the cells;

(b) determining whether hybridization has occurred between the DNA sequence in the probe and DNA in any MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, in the cells, cell lysates or fractions thereof; and

(c) relating the information obtained according to step (b) to determine the presence of the MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, in the cells, cell lysates or fractions thereof.

41. (New) A method for identifying in a biological sample MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome, which comprises the steps of:

(a) contacting the sample with a probe containing a DNA sequence, wherein the DNA sequence comprises the at least two foreign genes, which are homologous in comparison to each other, and at least a part of the sequence of the MVA-BN poxviral genome to permit hybridization between the homologous genes in the probe and the homologous genes from any MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, contained in the sample;

(b) determining whether hybridization has occurred between the DNA sequence in the probe and the DNA in any MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, contained in the sample; and

(c) relating the information obtained according to step (b) to determine the presence of the MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No.

V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, in the sample.

42. (New) A method for detecting cells, cell lysates or fractions thereof infected with MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome, which comprises the steps of:

(a) contacting the cells, cell lysates, or fractions thereof with DNA primers selectively amplifying the foreign genes;

(b) determining whether hybridization has occurred between the DNA primer and the DNA in the any MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome, contained in the cells, cell lysates or fractions thereof and

(c) relating the information obtained according to step (b) to determine the presence of the MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome, in the cells, cell lysates or fractions thereof.

43. (New) The method according to claim 42, wherein the cells, cell lysates or fractions thereof are, in addition or as an alternative to step (a), contacted with DNA primers selectively binding to the flanking sequences related to the insertion sites of the foreign genes.

44. (New) A method for identifying in a biological sample an MVA-BN recombinant poxvirus as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA-BN poxviral genome, which comprises the steps of:

(a) contacting the sample with DNA primers exclusively amplifying the foreign genes;

(b) determining whether hybridization has occurred between the DNA primer and the DNA in any MVA-BN as deposited at

the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome in the sample; and

(c) relating the information obtained according to step (b) to determine the presence of the MVA-BN as deposited at the European Collection of Animal Cell Cultures (ECACC) under No. V00083008, comprising at least two foreign genes which are homologous in comparison to each other, wherein each of said genes is inserted into a different insertion site of the MVA poxviral genome, in the sample.

45. (New) The method according to claim 44, wherein the sample is, in addition or as an alternative to step (a), contacted with DNA primers selectively binding to the flanking sequences related to the insertion sites of the foreign genes.